

04 JAN 2005



010405

21861 U.S. PTO

Practitioner's Docket No. 22046/09005

CHAPTER II

Preliminary Classification:

Proposed Class:

Subclass:

**TRANSMITTAL LETTER
TO THE UNITED STATES ELECTED OFFICE (EO/US)
(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)**

PCT/KR2003/001202

18 June 2003 (18.06.03)

08 July 2002 (8.07.02)

International Application No.

International Filing Date

Priority Date Claimed

SINTERED BODY WITH HIGH HARDNESS FOR CUTTING CAST IRON AND THE METHOD
FOR PRODUCING SAME

Title of Invention

PARK, Hee-Sub and RYOO, Min-Ho

Applicant(s)

Mail Stop PCT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

ATTENTION: EO/US

EXPRESS MAILING UNDER 37 C.F.R. § 1.10**(Express Mail label number is mandatory.)**(Express Mail certification is optional)*

I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date January 4, 2005 in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 as "Express Mail Post Office to Addressee" Mailing Label No. EV 600636615 US.

Mim Voet

Type or print name of person mailing paper

Date: January 4, 2005

Signature of person certifying

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- I. Applicant herewith submits to the United States Elected Office (EO/US) the following items under 35 U.S.C. § 371:
- a. This express request to immediately begin national examination procedures (35 U.S.C. § 371(f)).
 - b. The U.S. National Fee (35 U.S.C. § 371(c)(1)) and other fees (37 C.F.R. § 1.492) as indicated below:

2. Fees

CLAIMS FEE*	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS	10 - 20 =	0	x \$ 50.00 =	\$0.00
	INDEPENDENT CLAIMS	2 - 3 =	0	x \$ 200.00 =	0.00
	MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$ 360.00	\$0.00
BASIC FEE	U.S. PTO WAS NOT INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY				
	Where no international preliminary examination fee as set forth in § 1.482 has been paid to the U.S. PTO, and payment of an international search fee as set forth in Section 1.445(a)(2) to the U.S. PTO:				
	has not been paid (37 C.F.R. § 1.492(a)(3)) \$1,000.00				1,000.00
	Total of above Calculations				= 1,000.00
SMALL ENTITY	Reduction by 1/2 for filing by small entity, if applicable. Assertion must be made. (note 37 C.F.R. § 1.27)				- 0.00
	Subtotal				1,000.00
	Total National Fee				\$1,000.00
	Fee for recording the enclosed assignment document \$40.00 (37 C.F.R. § 1.21(h)). See Item 13 below). See attached "ASSIGNMENT COVER SHEET".				0.00
TOTAL	Total Fees enclosed				\$1,000.00

Attached is a check in the amount of \$1,000.00.

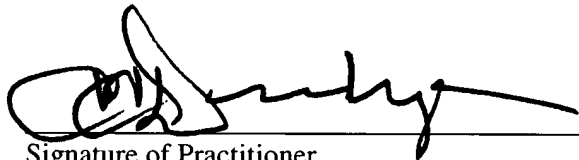
Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate copy of this sheet is enclosed.

3. A Preliminary Amendment is transmitted herewith.
4. A copy of the International application as filed (35 U.S.C. § 371(c)(2)) is transmitted herewith.
5. A translation of the International application into the English language (35 U.S.C. § 371(c)(2)) is not required as the application was filed in English.
6. An oath or declaration of the inventor (35 U.S.C. § 371(c)(4)) complying with 35 U.S.C. § 115 will follow.
- II. Other document(s) or information included:
 7. An International Search Report (PCT/ISA/210) or Declaration under PCT Article 17(2)(a) is transmitted herewith.
 8. An Information Disclosure Statement under 37 C.F.R. §§ 1.97 and 1.98 will be transmitted within THREE MONTHS of the date of submission of requirements under 35 U.S.C. § 371(c).
 9. Additional documents:
 - a. International Publication No. WO 2004/004954 A1
 1. Specification, claims and drawing
 - b.
 1. PCT/IB/301
 2. PCT/IB/304
 3. PCT/ISA/220
 4. PCT/IB/308
 - c.
 1. Patent Application Data Sheet (PADS - 4 pages)
 10. The above items are being transmitted before 30 months from any claimed priority date.

Date: January 4, 2005

Reg. No.: 35,124
Tel. No.: 864-250-2238
Fax No.: 803-255-9831
Customer No.: 27530



Signature of Practitioner
Charles E. Dunlap
Nelson Mullins Riley & Scarborough LLP
P. O. Box 11070
Columbia, SC 29211

Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 1,000.00**Complete if Known**

Application Number	Not yet assigned 10/520473
Filing Date	Herewith.
First Named Inventor	Hee-Sub Park et al.
Examiner Name	Not yet assigned.
Art Unit	Not yet assigned.
Attorney Docket No.	22046/09005

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☐ Deposit Account Deposit Account Number: _____ Deposit Account Name: _____

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	1,000.00
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180
Total Claims	Extra Claims	Fee (\$)
10 - 20 or HP = 0 x 50.00 = .00		
HP = highest number of total claims paid for, if greater than 20.		
Indep. Claims	Extra Claims	Fee (\$)
2 - 3 or HP = 0 x 200.00 = .00		
HP = highest number of independent claims paid for, if greater than 3.		
		Multiple Dependent Claims
		Fee (\$)
		Fee Paid (\$)
		.00

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).


Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	.00

4. OTHER FEES(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): _____

SUBMITTED BY

Signature 	Registration No. 35,124 (Attorney/Agent)	Telephone 864-250-2238
Name (Print/Type) Charles E. Dunlap, Esq.		Date January 4, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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01-05-05

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DT Rec'd PCT/PTO 04 JAN 2005

Practitioner's Docket No. 22046/09005

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: HEE-SUB PARK and MIN-HO RYOO

Application No.: Not yet assigned.

Group No.: Not yet assigned.

Filed: Herewith.

Examiner: Not yet assigned.

For: SINTERED BODY WITH HIGH HARDNESS FOR CUTTING
CAST IRON AND THE METHOD FOR PRODUCING SAME

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P.O. Box 1450

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ATTENTION: EO/US

EXPRESS MAIL CERTIFICATE

"Express Mail" label number EL 600633615 US

Date of Deposit 01/04/2005

I hereby state that the following *attached* paper or fee

1. Fee Transmittal (2 pages – original and copy)
2. Transmittal Letter to the United States Elected Office (EO/US)(Entry Into U.S. National Phase Under Chapter II) (3 pages – original and copy)
3. Preliminary Amendment (4 pages)
4. PCT Application No.: PCT/KR2003/001202 (specification, claims, abstract - 16 pages) and Drawings (2 sheets)
5. Form PCT/IB/301 (2 pages)
6. Form PCT/IB/304 (1 page)
7. Form PCT/IB/308 (1 page)
8. Form PCT/ISA/220 (1 page)
9. Form PCT/ISA/210 (3 pages)
10. Copy of PCT Publication No. WO 2004/004954 A1 (19 pages)
11. Patent Application Data Sheet (4 pages)
12. Check in the amount of \$1,000.00
13. Return Receipt Postcard

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to the:

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Signature of person mailing paper or fee

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.